

ABSTRACT OF THE DISCLOSURE

The invention concerns a method which can be carried out with a sensor device, for monitoring a laser machining operation to be performed on a work piece, in which for quality assurance with a local-resolution receiver assembly, a given field of observation is selected in the region of the interaction zone between laser beam and work piece, in which radiation coming from the selected field of observation is detected with a radiation-sensitive receiver which delivers an electrical signal corresponding to the detected radiation, in which the electrical signal is filtered in a signal processing circuit in order to detect rapid and/or short, fault-related changes in intensity of the detected radiation, and in which the filtered electrical signal is used for the detection of faults during the laser machining operation.